

patients had associated left superior vena cava. One patient required enlargement of the caval incision site by an additional patch. Follow up ranged from 2 to 12 months.

Results: There was no mortality or important morbidities. Post-operative echocardiographic examination of all patients showed unobstructed caval and pulmonary venous flow. Follow up ECG confirmed the absence of any arrhythmia.

Conclusion: Vertical trans-caval approach is a highly reproducible technique for correction of partial anomalous pulmonary venous drainage into the superior vena cava with very low incidence of complications.

<http://dx.doi.org/10.1016/j.ehj.2013.12.010>

Case-control study of potential culprit procedures for infective endocarditis in an Egyptian Tertiary Care Centre

Walid Ammar^{a,*}, Wafaa EL Aroussi^a, Asem EL Mahy^a, Amany EL Kholy^b, Hussein Rizk^a

^aDepartment of Cardiology, Cairo University, Egypt, ^bClinical Pathology, Cairo University, Egypt.

Background: Infective endocarditis (IE) is associated with substantial morbidity and mortality. The numbers of patients with chronic predisposing medical comorbidities have increased as has the commensurate risk of exposure to nosocomial bacteremia. However, there are conflicting views as to the significance of bacteremia caused by interventional procedures in the existing IE clinical guidelines.

Aim of the work: Many IE risk factors have been postulated, but formal evaluation of these risk factors is lacking in Egyptian tertiary care Centers. In this study, we test the hypothesis that underlying medical conditions, not culprit procedures, are the most important risk factor for development of IE in an Egyptian tertiary care center.

Patients and methods: We matched 175 patients with definite IE from the IE database of Cardiology Department at Cairo University Hospital with 175 control cases without IE, matched for age, sex, and underlying heart disease. Demographic and clinical data, comorbidities and potential culprit procedures during the 3 months prior to the diagnosis of IE were recorded in both groups. Continuous and categorical variables were compared using a two-tailed *t*-test and Pearson's chi-square analysis, respectively. Correlations were tested using Pearson's correlation coefficient.

Results: Host-related risk factors included renal impairment (12% vs. 1.1%, $p < 0.001$), renal dialysis (6.3% vs. 0.6%, $p = 0.003$) and prior episode of IE (5.1% vs. 1.1%, $p = 0.03$). Procedure-related risk factors included a history of hospitalization for at least 24 hours in the preceding 3 months, (42.3% vs. 14.9%, $p < 0.001$), and use of peripheral intravenous (IV) line (18.2% vs. 8.2%, $p = 0.005$). Any form of dental procedure was not a risk factor for IE. *Staphylococcus* species especially *Staphylococcus aureus* was the most prevalent causative and procedure-related microorganism (27.3%), followed by *Streptococcus* species in 15.9% of cases.

Conclusions: Hospitalization for at least 24 h within the preceding 3 months and peripheral IV line placement during that hospitalization were significant risk factors for IE. Our study also confirmed renal impairment and prior IE as risk factors. *Staphylococci* were the predominant causative microorganisms. These results suggest a nosocomial source of infection and call for reinforcement of infection prevention interventions in Egyptian hospitals especially in high-risk patients.

<http://dx.doi.org/10.1016/j.ehj.2013.12.011>

Case report: Pentalogy of cantrell

Al sayed salem *

NHI.

Pentalogy of Cantrell is a type of ectopia cordis including: defect in anterior diaphragm, pericardium, anterior abdominal wall in addition to extrusion of part of the heart outside the mediastinum and structural heart disease. We were faced by a case of 2 years old girl presented by a visible large pulsating swelling in the lower part of the chest and upper part of anterior abdominal wall in addition to other manifestations of pulmonary congestion and heart failure. After echocardiography, MSCT was done for completing the diagnosis, the cardiac lesion was a large apical VSD with biventricular dilatation and the apex of the heart forms a long tail like swelling passing through a large anterior pericardial and diaphragmatic defect to lie under the anterior abdominal wall. Under full CPB and cardioplegic arrest; the excess aneurysmal part of cardiac apex was excised and the Apical VSD was closed the aneurysmectomy opening because it was in accessible through the RT atrium. The PT needed high inotropic support, prolonged ventilation and ICU stay and discharged on day 15 with maximized medical treatment because the ICU and pre discharge echo shows only minimal improvement of the already severely impaired myocardial function EF ~ 30% and severe PH.

<http://dx.doi.org/10.1016/j.ehj.2013.12.012>

Catheter-based radiofrequency renal sympathetic denervation for resistant hypertension: initial Egyptian experience

Hazem Khamis, Ahmed Abdeaziz.

Objectives: To evaluate the feasibility, efficacy, and safety of catheter-based radiofrequency renal sympathetic denervation for treatment of resistant hypertension.

Background: In a subpopulation of patients with essential hypertension, therapeutic targets are not met, despite the use of multiple types of medication. In this paper we describe our first experience with a novel percutaneous treatment modality using renal artery radiofrequency (RF) ablation.

Methods: Thirty patients with essential hypertension unresponsive to at least three types of antihypertensive medical therapy (baseline office systolic blood pressure ≥ 160 mmHg) were selected between March and September 2012 and received percutaneous RF ablation. Patients were followed up for 6 months after treatment. The primary effectiveness endpoint was change in seated office-based measurement of systolic blood pressure at 6 months. Another thirty patients were taken as control.

Results: A reduction of mean office blood pressure was seen from $170/102 \pm 9/5$ mmHg at baseline to $151/91 \pm 8/6$ mmHg at 6 months follow-up ($p = 0.001$). Also, we noted a significant decrease in plasma renin activity (3.66 ± 0.64 versus 3.37 ± 0.47 ng/mL/h; $p = 0.003$). No periprocedural complications, adverse events or change in renal function were noted during follow-up.

Conclusion: Catheter-based renal denervation seems an attractive minimally invasive treatment option in patients with resistant hypertension, with a low risk of serious adverse events.

<http://dx.doi.org/10.1016/j.ehj.2013.12.013>